## nielsen Industrial PhD Opportunity

The R&D group in Nielsen opens the opportunity to apply for a new **PhD position on "Artificial Intelligence applied to e-commerce"** under the spanish Industrial PhD program. Our group with more than 100 associates, is part of a large international company working on the space of consumer and retailer observation. The consolidated R&D group focuses on Computer Vision and Natural Language Processing technologies applied for e-commerce and it's composed of more than 15 doctors in relevant fields of Artificial Intelligence such as Computer Vision, NLP, Signal Processing, Physics, etc. with a strong publication record.

**Goal**: Today, AI/ML techniques (and in particular, deep learning) achieve outstanding results surpassing humans in many tasks such as object recognition, facial recognition, license plate readers, text classification, or breast tomosynthesis diagnosis. However, the dynamic fast-growing nature of the e-commerce domain poses unexplored challenges that need to be addressed. In this Project, we will develop novel AI/ML techniques to process textual data (short descriptions, titles, opinions, etc.) and/or images (products, invoices, leaflets, receipts, etc) in order to address problems such as item recognition, information extraction and segmentation. We will explore new techniques for domain adaptation to transfer knowledge from different domains, enrich product analysis by multimodality or apply reinforcement learning to learn from collaborative item coding. The fellowship will be integrated in a strategic project within Nielsen to drive the digitalization change of the company, where we will collaborate with several international teams to validate our algorithms in real situations. The candidate will be part of the "Fundamental AI Research" team.

**Requirements**: Students graduated in Computer science, Informatics, Mathematics, Physics, Electrical engineering, Telecommunications or related careers and possessing the necessary credits to be admitted to a PhD program in Spain. An academic partner that is eligible to apply for the Industrial PhD program.

**Duration**: 12 months renewed until 3 or 4 years, in total. Opportunity of permanent position upon completion of the program.

**Applications**: Interested candidates should send their application, CV and academic transcript to: David Jiménez-Cabello, e-mail: <u>david.jimenez@nielsen.com</u>

Deadline:

- 1st call: Ministerio de Ciencia e Innovación: January 2021
- 2nd call: Comunidad de Madrid: May-June 2021 (pending confirmation)